

REMARKS

This communication is submitted in response to the Office Action of May 12, 2004.

Claims 1-17, 19-24, 28-39, 51-57 and 59-63 are pending in the subject application with claims 1, 19, 20, 22-24, 28-37, 51, 52, 56, 57 and 59-61 being currently amended, claim 63 being added and claim 18 being currently canceled. Claims 25-27, 40-50 and 58 were previously canceled. Claims 2, 4, 23, 24, 33 and 34 stand withdrawn from consideration by the Examiner. Claims 2-17, 21, 38, 39, 53-55 and 62 have not been changed relative to their immediate prior version.

The amendments to the claims and the newly presented claim are supported throughout the specification as originally filed and do not introduce any new matter.

Reconsideration of the subject application is respectfully requested in view of the foregoing amendments and the following remarks.

Claims 20, 21 and 36-38 were objected to by the Examiner but were indicated as being allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims. Since claims 20 and 36 have each been amended to be rewritten in independent form to include all of the limitations of their base claims and any intervening claims, claims 20 and 36 should now be allowable along with dependent claims 21, 37 and 38.

The rejection of claim 18 is submitted to be moot in view of claim 18 having been canceled.

The rejection of claims 1, 3, 5, 22, 28, 35, 39, 51 and 53-55 as being anticipated by Ohayon, the rejection of claims 56, 57 and 59 as being anticipated by Tanaka et al,

the rejection of claims 6-17 and 30-32 as being unpatentable over Ohayon, and the rejection of claims 19, 29, 52 and 60-62 as being unpatentable over Ohayon in view of Woodhall et al are respectfully traversed for the following reasons.

Initially, it is pointed out that none of the apparatus claims presently under consideration in the subject application can properly be regarded as product by process claims, it being noted that dependent claim 18 has been canceled from the application. In particular, independent claim 1 positively recites specific features for the elements of a stabilized window structure without claiming the stabilized window structure in terms of a method or process by which it is made. Similarly, independent claim 56 recites specific features for the elements of a protected window pane and, like independent claim 1, independent claim 56 cannot be considered a product by process claim.

Independent claim 1 recites "a window frame; a shattered window pane disposed in said window frame and having an exposed exterior surface and an exposed interior surface circumscribed by said window frame; and a solidified layer of unifying material adhesively bonded by itself directly to a substantial portion of at least one of said exterior surface or said interior surface, said layer of unifying material being capable of being sprayed onto said window pane in a fluidic form and of solidifying on said window pane to adhesively bond itself to said window pane, said solidified layer of unifying material and said window pane bonded thereto forming an integral, rigid cohesive mass in which said shattered window pane is structurally united by said unifying material, said cohesive mass being removable from said window frame as one or more integral and unitary pieces." The totality of the stabilized window structure recited in independent claim 1 is not taught or suggested by Ohayon.

The Examiner identifies the mirror housing 32, 64, the damaged mirror glass 14, 56, and the adhesive tape 12 of Ohayon as respectively corresponding to the window frame, the shattered window pane, and the layer of unifying material recited in independent claim 1. However, it is submitted that the Examiner has overlooked critical distinctions between the teachings of Ohayon and the claimed invention and has interpreted Ohayon beyond the reasonable scope of its disclosure using impermissible hindsight made possible only by the present invention. The automobile side view mirror glass 14, 56 to which Ohayon pertains is commonly known as comprising a mirror of relatively small size surface area and light weight. The mirror glass 14, 56 is mounted by the mirror housing 32, 64 such that the interior surface of the mirror glass is not exposed and, in the case of housing 32, the interior surface of mirror glass 14 is actually adhesively secured to a carrier tray 36 of the housing. The adhesive tape 12 is explicitly defined by Ohayon as comprising a shatterproof or impact-resistant tape, such as paper, plastic or fabric, having a surface to which a layer of adhesive is applied (page 11, lines 23-33). The only purpose for the adhesive layer of tape 12 is to serve as a medium to attach the shatterproof or impact-resistant tape material to the damaged mirror glass 14,56, thereby allowing the mirror glass to be shattered into small pieces by a hammer impacting the shatterproof or impact-resistant material.

The tape 12 of Ohayon is disclosed as being manually applied to the damaged mirror glass 14, 56 by forcefully pressing the tape 12 against the damaged mirror glass using the fingers. Accordingly, it is essential to Ohayon that the damaged mirror glass be either secured to the carrier tray 36 as shown in Figs. 1 and 2 for damaged mirror glass 14 or that the damaged mirror glass not be shattered to the point of losing its

structural integrity or connectivity as is necessary for damaged mirror glass 56 shown in Figs. 5 and 6. Otherwise, the damaged mirror glass would collapse or cave in due to the manual pressure exerted on it as the tape 12 is pressed against the damaged mirror glass. In addition to the obvious logical inferences, the explicit teachings of Ohayon make it clear that the application of tape 12 to a mirror that is already shattered to the point of losing its structural integrity or connectivity is not contemplated, because Ohayon requires in the case of both damaged mirrors 14 and 56 that the damaged mirrors be intentionally forcefully shattered into small pieces (by a hammer impacting the tape 12) after the tape 12 has been applied thereto.

The claimed invention has no such limitations with respect to the size and weight of window panes which may be stabilized, with respect to the need for a carrier tray, and with respect to the extent to which the window panes may have lost structural integrity or connectivity. Indeed, the majority of window panes found in buildings are of significantly greater size and weight than automobile side view mirrors. One seeking to solve the problem of safely stabilizing or removing any types of shattered window panes without limitations on size, weight, window structure and/or extent of damage would not find a solution in Ohayon. The teachings of Ohayon are merely a variation of the prior and ineffective hammering and taping approaches to stabilizing or removing shattered glass as discussed in applicant's specification on page 3, line 6 - page 4, line 18.

In addition to the foregoing distinctions, there are additional salient differences between the stabilized window structure recited in claim 1 and the structure that results from the teachings of Ohayon when the tape 12 is applied to damaged mirror glass 14,56. As noted above, Ohayon requires that the tape 12 be made of a shatterproof or

impact-resistant tape having a surface provided with a layer of pressure-sensitive adhesive. Conventional pressure-sensitive adhesive tapes, from which Ohayon does not distinguish tape 12, are commonly known to have the adhesive applied thereon in a very thin layer and are commonly known to be highly flexible and of relatively low strength and adhesion. In Fig. 7 of Ohayon, for example, the adhesive surface on mirror glass 52 is so thin as to not even be visible. Ohayon makes no distinction between the adhesive surface of tape 12 and the adhesive surfaces of handle base 20 and spacer strips 42, which are disclosed by Ohayon as being removable and, therefore, of low adhesion. The Examiner in the Office Action also refers to the adhesive tape 12 as "removable". The fact that Ohayon requires that both the damaged mirror glass 14 and 56, which are themselves already relatively small in size and lightweight, be intentionally shattered into small pieces after the tape 12 has been applied thereto adds further credence to the conclusion that the adhesion between tape 12 and the damaged mirror glass is of low strength and insufficient to form an integral cohesive mass in which the damaged mirror glass is structurally united for removal from the mirror housing. If the tape 12 was capable of bonding to the damaged mirror glass with sufficient strength to form an integral cohesive mass in which the damaged mirror glass is structurally united by the tape for removal from the mirror housing, there would be no reason to require that the damaged mirror glass be thereafter intentionally smashed into small pieces, especially since the requirement for intentional smashing of the mirror glass disadvantageously involves additional structural and operational complexity.

In addition to failing to disclose the type of bond between tape 12 and mirror

glass 14,56 needed to form a removable, integral cohesive mass in which the damaged mirror glass is structurally united, Ohayon fails to disclose the formation of an integral, rigid cohesive mass resulting from tape 12 applied to a damaged mirror. Adhesive tapes such as the tape 12 of Ohayon are conventionally known to be highly flexible, and the tape 12 of Ohayon must be flexible to accommodate shattering of mirror glass 14,56 through tape 12. Also it is necessary that the structure formed by tape 12 applied to mirror glass 14 be flexible to permit progressive insertion of a tool behind the mirror glass to incrementally pry the structure away from the carrier tray 36 and peel it away from the mirror housing as required by the teachings of Ohayon. In contrast to the layer of unifying material bonded to the window pane to form a removable, integral, rigid cohesive mass as recited in claim 1, the flexible adhesive tape 12 adhered to the damaged mirror glass 14,56 of Ohayon cannot be considered as forming a removable, integral, rigid cohesive mass in which the mirror glass is structurally united by the tape 12 in the same sense as the removable, integral, rigid cohesive mass of applicant's invention. Accordingly, there are no teachings or suggestions whatsoever in Ohayon to support the Examiner's conclusion that the tape 12 is bonded to the mirror glass to form a removable, integral, much less rigid, cohesive mass in which the mirror glass is structurally united. No integral, rigid cohesive mass or structural unity between the tape 12 and the damaged mirror glass does or can exist where the tape 12 adheres to the mirror glass with a low adhesive force and is in fact removable as disclosed by Ohayon. Moreover, a rigid cohesive mass is not and cannot be obtained from the structure resulting from tape 12 applied to a damaged mirror glass where the structure must be flexible as disclosed by Ohayon.

Claim 1 calls for the same layer of unifying material to be adhesively bonded by itself directly to the window pane, to be capable of being sprayed onto the window pane in fluidic form and of solidifying on the window pane to adhesively bond itself to the window pane, and to form an integral, rigid cohesive mass with the shattered window pane in which the shattered window pane is structurally united by the layer of unifying material. The tape 12 of Ohayon is a multi-layer element comprising the layer of shatterproof or impact-resistant material and the layer of adhesive, and neither layer can be considered as meeting the limitations recited for the layer of unifying material. The layer of shatterproof or impact-resistant material of tape 12 is not adhesively bonded by itself directly to the damaged mirror glass 14,56. Rather, the layer of shatterproof or impact-resistant material requires the intermediary of the adhesive layer in order to adhere to the mirror glass. There are no teachings or suggestions whatsoever by Ohayon of the shatterproof or impact-resistant layer being capable of being sprayed onto the damaged mirror in fluidic form and solidifying on the damaged mirror to adhesively bond itself thereto. Ohayon's requirement that the tape 12 be flexible to allow the mirror to be shattered therethrough precludes the layer of shatterproof or impact-resistant material from forming a rigid cohesive mass with the damaged mirror. Also, the particular shatterproof or impact-resistant materials disclosed by Ohayon cannot be considered as having any properties which would allow them to function, with or without the adhesive layer thereon, as a unifying material structurally uniting the damaged mirror glass in an integral, rigid cohesive mass. Although the adhesive layer of tape 12 may be considered as being bonded by itself directly to the damaged mirror glass, it lacks (with or without the layer of shatterproof or

impact-resistant material) the adhesion and strength needed to form an integral, rigid cohesive mass having structural unity with the mirror glass. The adhesion between tape 12 and mirror glass 14 is not even strong enough to allow the mirror glass 14 to be removed from the carrier tray with tape 12 unless a tool is used to incrementally forcefully pry the mirror glass away from the carrier tray 36. The adhesion between tape 12 and mirror glass 56 is not even strong enough to allow the minor glass to be removed from the mirror housing with tape 12 unless the minor glass is first shattered into small pieces after the tape is applied. Moreover, there are no teachings or suggestions whatsoever in Ohayon of the adhesive layer or any other layer of material being capable of being sprayed onto the damaged mirror glass in a fluidic form and of solidifying on the mirror glass to adhesively bond itself to the mirror glass and form an integral, rigid cohesive mass. Rather, as pointed out above, the teachings of Ohayon are limited to the manual forceful application of a pressure-sensitive adhesive tape by direct force. This limitation and the other limitations discussed above prevent the realization of a stabilized window structure having the features recited in claim 1. Accordingly, independent claim 1 cannot be anticipated by Ohayon and is submitted to be clearly patentable over Ohayon along with dependent claims 2-17, 19 and 22-24.

The deficiencies of Ohayon are not rectified by Woodhall et al or by Tanaka et al. Woodhall et al relates to a masking film for protecting surfaces during mechanical processing operations. The fact that Woodhall et al discloses the masking film can be applied by spraying does not make Woodhall et al relevant to the claimed invention or make it obvious to apply any of the layers of tape 12 of Ohayon to damaged mirror

glass by spraying to form an integral, rigid, structurally cohesive mass. Like the tape 12 of Ohayon, the masking film of Woodhall et al does not form an integral, rigid cohesive mass with the object on whose surface the masking is applied. Indeed, Woodhall et al explicitly discloses the masking film as being “easily” removed and as being removable by peeling, thusly requiring that the masking film be maintained on a surface with very minimal force and also be flexible. Moreover, masking films by nature are conventionally known to be of minimal thickness and minimal strength. Temporarily protecting surfaces with a thin masking film requires very little in terms of mechanical performance, adhesion and strength, and masking films do not have the mechanical properties to structurally unite a shattered window pane together in an integral, rigid cohesive mass. The masking film of Woodhall et al is not intended to have the properties necessary to adhesively bond itself to a shattered window pane to form an integral, rigid cohesive mass in which the shattered window pane is structurally united by the masking film for removal from a frame. The teachings of Woodhall et al cannot be combined with Ohayon to arrive at the claimed invention since, as explained above, Ohayon also does not disclose any layer of unifying material adhesively bonded by itself directly to a shattered window pane to form an integral, rigid cohesive mass in which the shattered window pane is structurally united by the unifying material.

Tanaka et al is not relevant to the claimed invention, relating as it does to pressing a glass substrate 5 into a cavity 2a of a lower mold by using an upper mold 1 to press the glass substrate into the cavity 2a of the lower mold to manufacture a glass container. In a discussion of the prior art wherein glass containers are formed by individual glass pieces bonded together by seal glass material, Tanaka et al mentions

that the seal glass material is melted to create the bond and, as a result of this melting, the seal glass material disadvantageously generates foam possibly causing leakage through the glass containers. Tanaka et al does not disclose any structural elements corresponding to any of the structural elements recited in independent claim 1 and fails to provide any teachings or suggestions by which Ohayon can be modified to obtain the claimed invention.

Dependent claims 2 and 4 were withdrawn from consideration by the Examiner but should be allowable along with independent claim 1. With respect to dependent claim 4, it is noted that the structural arrangement disclosed by Ohayon cannot be applied to a window pane disposed in a window frame in a building since the invention disclosed by Ohayon would be inoperable in conjunction with the relatively large and heavy window panes found in buildings.

Dependent claims 6-17 recite specific materials for the unifying material, none of which are disclosed or made obvious by the teachings of Ohayon. Contrary to the assertion made by the Examiner, one skilled in the art would not be motivated to employ the materials recited in dependent claims 6-17 as the adhesive layer of tape 12. As discussed above, the adhesive layer disclosed by Ohayon for tape 12 does not, cannot and is not intended to serve as a unifying material to form an integral, rigid cohesive mass in which the damaged mirror glass is structurally united. Rather, the adhesive layer is merely an intermediary used to secure the shatterproof or impact-resistant layer to the mirror glass in a manner not forming an integral, rigid cohesive mass. The shatterproof or impact-resistant layer is of primary importance in Ohayon, while the adhesive layer is of secondary importance, because the shatterproof or

impact-resistant layer is necessary to allow the mirror glass to be smashed using a hammer impacting the shatterproof or impact-resistant layer. The use of polymeric foam in particular for the adhesive layer of tape 12 would not be obvious from Ohayon and is actually discouraged by the teachings of Ohayon, since the use of a foam layer adhesive would provide a cushioning effect making it more difficult to intentionally smash the mirror glass with a hammer impacting the shatterproof or impact-resistant layer. Also, a solidified polymeric foam as the adhesive layer for tape 12 would be too rigid to permit a tool to be inserted behind the mirror glass 14 to forcefully pry it away from the carrier tray 36. The structure and intrinsic physical response to applied forces for the tape 12 are completely different from those of the claimed layer of unifying material and cohesive mass, and the specific unifying materials recited in the claims cannot be considered interchangeable with the pressure-sensitive adhesive or the shatterproof or impact-resistant material disclosed by Ohayon for tape 12. Accordingly, claims 6-17 are submitted to be clearly patentable over Ohayon for the additional limitations recited therein as well as being allowable with independent claim 1.

Dependent claim 19 recites the unifying material being disposed within a crack in the shattered window pane and forming a structural bond at the crack when the unifying material solidifies. The adhesive layer of tape 12 disclosed by Ohayon lacks any properties which would enable the adhesive to be disposed within a crack in the mirror glass, much less form a structural bond at a crack. As explained above, the adhesive of tape 12 is incapable of forming a structural bond with the mirror glass, as the low adhesion of tape 12 prevents any type of structural unity between it and the mirror glass. Indeed, it is the intention of Ohayon not to form a structural bond at any cracks

in the mirror glass because the formation of a structural bond in cracks in the mirror glass would defeat the purpose of intentionally smashing the mirror glass into small pieces after the tape 12 is applied. As pointed out above, Woodhall et al does not relate to a unifying material capable of uniting a shattered window pane and, with respect to a surface having cracks, Woodhall et al actually discloses that the masking material should not penetrate any cracks (column 3, lines 1-3). Even if Woodhall et al can be considered as providing a teaching of the masking material disposed within a crack, the masking material is incapable of forming a structural bond at the crack for the reasons noted above. Accordingly, claim 19 is submitted to be clearly patentable over Ohayon in view of Woodhall et al for the additional limitations recited therein as well as being allowable with claim 1.

Claims 23 and 24 depend from claim 1 and were withdrawn from consideration by the Examiner. Since independent claim 1 is now allowable, dependent claims 23 and 24 should also be allowable therewith. With respect to dependent claim 23, it is noted that Ohayon and the other references cited and applied by the Examiner do not teach or suggest a layer of unifying material including a plurality of individual sub-layers arranged one on top of the other. With respect to independent claim 24, none of the references cited and applied by the Examiner teach or suggest a layer of unifying material including first and second layers of unifying material respectively bonded to the exterior surface and the interior surface of a shattered window pane. In particular, the structural arrangement disclosed by Ohayon prevents any layer of unifying material from being applied to an interior surface of the damaged mirror glass, the interior surface being unexposed and completely inaccessible within the mirror housing.

Independent claim 28 relates to a method of stabilizing and removing a shattered window pane from a window frame and recites “spraying a layer of fluidic unifying material onto a substantial portion of at least one of an exterior surface ... or an interior surface of the shattered window pane ...; allowing the fluidic unifying material to solidify on the window pane to adhesively bond the layer of unifying material to the window pane to structurally unite the shattered window pane and form a cohesive mass including the window pane and the layer of unifying material bonded thereto; and removing the cohesive mass from the window frame”. The steps recited in claim 28 are not disclosed or suggested by Ohayon and are not inherent to any structural arrangement derived from the teachings of Ohayon. Ohayon involves the application of pre-formed adhesive tape 12 to damaged mirror glass using direct forceful pressure by manually pressing the tape against the mirror glass with the fingers. Ohayon fails to recognize the potential for any unifying material to be sprayed onto the damaged mirror glass in fluidic form and to solidify on the mirror glass to adhesively bond thereto and structurally unite the damaged mirror glass in a cohesive mass that can be removed from the mirror housing. Otherwise, there would be no need for Ohayon to require the dangerous step of intentionally smashing the mirror glass after the tape 12 has been applied. Moreover, Ohayon fails to perceive of any unifying material adhesively bonded to the damaged mirror glass as a result of allowing a fluidic unifying material to solidify on the mirror glass. Woodhall et al's teaching of masking films fails to rectify the deficiencies of Ohayon in that neither reference reasonably discloses or suggests a layer of fluidic unifying material capable of solidifying on a shattered window pane to adhesively bond the layer to the window pane to structurally unite the shattered window

pane and form a cohesive mass. In Woodhall et al, the masking films are specifically required to be easily removable from the surfaces to which they are applied, thusly leading one away from the type of bond required to structurally unite a shattered window pane and form a cohesive mass. The field of endeavor to which Woodhall et al is related cannot properly be considered relevant to the field of the present invention. Accordingly, independent claim 28 is submitted to be clearly patentable over Ohayon, considered individually or in combination with the other references cited by the Examiner, and should be allowable along with dependent claims 29-35 and 39.

Dependent claims 30-32 recite the step of spraying in conjunction with specific unifying materials. As discussed above in connection with dependent claims 6-17, these specific material cannot be considered obvious in view of Ohayon. In particular, the step of spraying involving polymeric foam is not obvious over Ohayon and is actually incompatible with the teachings of Ohayon for the reasons explained above. Accordingly, dependent claims 30-32 are submitted to be clearly patentable over Ohayon for the additional limitations recited therein as well as being allowable with claim 28.

Claims 33 and 34 depend from claim 28 and were withdrawn from consideration by the Examiner. Since claim 28 is now allowable, claims 33 and 34 should also be allowable. With respect to claim 33, it is noted that none of the references cited and applied by the Examiner teach or suggest a step of spraying involving spraying a layer of fluidic unifying material as a plurality of sub-layers sequentially sprayed one on top of the other. With respect to claim 34, none of the references cited and applied by the Examiner teach or suggest a step of spraying involving spraying first and second layers

of fluidic unifying material respectively onto the exterior surface and the interior surface of a shattered window pane. As noted above, in Ohayon it is impossible to spray a layer of fluidic unifying material on an interior surface of the mirror glass since the rearward or interior surface of the mirror glass is enclosed by the mirror housing and not exposed.

Independent claim 51 recites “spraying a layer of fluidic unifying material onto a substantial portion of at least one of an exterior surface ... or an interior surface of the shattered window pane ...; allowing the layer of fluidic unifying material to solidify on the window pane to adhesively bond the layer of unifying material to the window pane with sufficient strength to structurally unite the shattered window pane and form a rigid cohesive mass including the shattered window pane and the solidified layer of unifying material bonded thereto; and leaving the cohesive mass in place to stabilize the window structure for a desired length of time.” The method disclosed by Ohayon involves pressing tape 12 against the damaged mirror glass with direct manual pressure on the mirror glass whereas the method claimed in claim 1 involves spraying a layer of fluidic unifying material onto a shattered window pane. Since Ohayon does not contemplate spraying a fluidic unifying material, it follows that Ohayon does not and cannot teach or suggest the further step recited in claim 51 of allowing the layer of fluidic unifying material to solidify on a window pane to adhesively bond the layer of unifying material to the window pane with sufficient strength to structurally unite the shattered window pane and form a rigid cohesive mass. As pointed out above, the structure resulting when tape 12 is applied to mirror glass 14,56 lacks structural unity, cohesiveness and rigidity. The deficiencies of Ohayon are not rectified by Tanaka et al or Woodhall et al. As

pointed out above, Tanaka et al and Woodhall et al do not even relate to the stabilization of shattered glass and, in particular, do not disclose any teachings relevant to forming a shattered window pane into a rigid cohesive mass. Notably, the masking films disclosed by Woodhall et al are by their very nature incapable of achieving structural unity, cohesiveness or rigidity in a shattered window pane. Neither Ohayon, Tanaka et al nor Woodhall et al disclose any materials or methods by which a layer of fluidic unifying material can be allowed to solidify on a shattered window pane to bring about adhesive bonding of the layer of unifying material to the shattered window pane with sufficient strength to structurally unite the shattered window pane and form a rigid cohesive mass. Accordingly, independent claim 51 cannot be anticipated by Ohayon and is submitted to be clearly patentable over Ohayon considered singly or in any reasonable combination with Tanaka et al or Woodhall et al. Claims 52-55 depend from claim 51 and should be allowable therewith.

With respect to dependent claims 53-55, it is noted that Ohayon fails to disclose any properties for tape 12 which would enable it to prevent fragments of a shattered window pane from becoming loose, to prevent a shattered window pane from collapsing or to restore sealing functionality to a shattered window pane. The low-strength, low-adhesion tape 12 of Ohayon cannot be used to perform any of the types of stabilization recited in claims 53-55, and the removable low-performance masking films disclosed by Woodhall et al also cannot perform the types of stabilization recited in claims 53-55. Indeed, the application of tape 12 to a shattered window pane with direct manual pressure would actually promote the loosening of fragments, collapsing of a shattered window pane and further loss of sealing functionality in a shattered window pane by

virtue of the pressure that would have to be applied to the shattered window pane to attach the adhesive tape thereto. Accordingly, dependent claims 53-55 cannot be anticipated by Ohayon and are submitted to be clearly patentable over Ohayon considered singly or in any reasonable combination with the other references cited and applied by the Examiner.

Independent claim 56 recites "a window pane having a perimeter mounted in a window frame, said window pane having an exposed exterior surface and an exposed interior surface circumscribed by said frame; a layer of polymeric foam adhered to at least a substantial portion of at least one of said exterior surface or said interior surface to provide protection to said window pane, said foam and said window pane forming a protected window pane; and one or more handles secured to said protected window pane by adhesion of said one or more handles with said foam, wherein the adhesion between said foam and said window pane and between said one or more handles and said foam is provided by said foam itself and is of sufficient strength to allow said protected window pane to be removed from said frame by manually pulling on said one or more handles without detaching said foam from said window pane." It is only through impermissible hindsight reconstruction that Tanaka et al can be considered even remotely relevant to the structure claimed in claim 56. Tanaka et al relates to glass containers and methods of manufacturing glass containers, which has nothing whatsoever to do with a window pane having a perimeter mounted in a window frame. The Examiner refers to Fig. 4(e) of Tanaka et al as illustrating a protected window pane meeting the limitations of claim 56. On the contrary, no part of the glass container depicted in Fig. 4(e) constitutes a window pane having a perimeter mounted in a

window frame and having an exposed exterior surface and an exposed interior surface circumscribed by the frame. Rather, the glass piece 32 defines the bottom of container 35 and the frame 34 defines the sides of the container. Moreover, the seal glass material 33 depicted by Tanaka et al in Fig. 4(e) is disposed along only the outer peripheral edge of glass piece 32 for bonding with the seal glass material disposed along the perimeter of frame 34. Accordingly, the seal glass material 33 is not adhered to at least a substantial portion of an exposed exterior surface or an exposed interior surface of glass piece 32. The only purpose for the seal glass material 33 is to bond the frame 34 to the glass piece 32 and there would be absolutely no reason whatsoever to apply the seal glass material 33 to any parts of glass piece 32 not in contact with the frame 34. Contrary to the Examiner's assertions, the seal glass material 33 does not provide any protection to the glass piece 32, its only purpose being to bond with the seal glass material on the frame 34. The seal glass material 33 also does not constitute a layer of polymeric foam and the only reference to foam made by Tanaka et al relates to the fact that the seal glass material undesirably generates foam when melted (column 1, lines 48-50). Another reason why the seal glass material 33 cannot be considered as constituting a layer of polymeric foam relates to the fact that Tanaka et al refers to calcination of the seal glass material. Since calcination involves a conversion of metals into their oxides as a result of heating to a high temperature, the seal glass material 33 must be considered as being metallic in nature. The frame 34 cannot properly be considered as corresponding to the recited window frame and the recited handle, and Fig. 4(e) provides no teachings or suggestions whatsoever of the glass piece 32 being removable from a frame by manually pulling on the frame 34. In

particular, there are no teachings or suggestions whatsoever in Tanaka et al of the seal glass material 33 providing a sufficiently strong adhesion with the glass piece 32 and with the frame 34 to allow the glass piece 32 to be removed from a circumscribing frame. It is submitted, therefore, that independent claim 56 cannot be anticipated by Tanaka et al and that claim 56 is clearly patentable over Tanaka et al along with dependent claims 57, 59 and 63.

With respect to newly presented dependent claim 63, it is noted that Tanaka et al does not disclose a shattered window pane and does not disclose the seal glass material 33 structurally unifying a shattered window pane into a cohesive mass. Rather, all of the glass pieces illustrated in Tanaka et al are intact and undamaged glass pieces.

Independent claim 60 recites “applying a layer of fluidic unifying material to at least one of an exterior surface ... or an interior surface of the shattered window pane ..., said step of applying be accomplished by spraying the fluidic unifying material on the at least one of the exterior surface or the interior surface without applying pressure to the shattered window pane other than the pressure of the fluidic unifying material itself; allowing the layer of fluidic unifying material to solidify to bond the layer of unifying material to the window pane to structurally unite the shattered window pane and form a rigid cohesive mass ...; and removing the cohesive mass from the window frame as one or more integral and unitary pieces.” The method disclosed by Ohayon is in direct opposition to that recited in claim 60. In Ohayon, direct manual pressure from the fingers is applied to the damaged mirror glass in addition to the pressure of the tape 12 itself. As pointed out above, Ohayon does not contemplate the application of a fluidic

unifying material to the damaged mirror glass, much less spraying a fluidic unifying material on the damaged mirror glass without applying pressure to the damaged mirror glass other than the pressure of the fluidic unifying material itself. Having failed to contemplate the application of a fluidic unifying material, it follows that Ohayon fails to contemplate solidification of a fluidic unifying material to bond the layer of unifying material to the damaged mirror glass. In contrast, the claimed invention calls for solidification of a fluidic unifying material to bond the layer of unifying material to a shattered window pane. Woodhall et al fails to rectify the deficiencies of Ohayon and, like Ohayon, Woodhall et al fails to disclose the masking films as forming a rigid cohesive mass with the structures on which they are applied. Rather, the essence of masking films is that they are applied temporarily and easily removable, and Woodhall et al explicitly discloses the masking films as being easily removable. In addition, the nature of masking films is that they are low-performance, low-strength films which are incapable of structurally uniting a shattered window pane to form a rigid cohesive mass. Accordingly independent claim 60 is submitted to be clearly patentable over Ohayon in view of Woodhall et al and should be allowable along with dependent claims 61 and 62.

Dependent claim 61 calls for adhesively bonding the layer of unifying material to the window pane with a permanent bond, and Ohayon fails to contemplate solidification of a layer of fluidic unifying material to permanently bond the layer of unifying material to a shattered window pane. If the bond provided by Ohayon between tape 12 and the damaged mirror glass was sufficiently permanent, there would be no need to forcefully pry the mirror away from the carrier tray 36 and there would be no need to smash the mirror into small pieces prior to removal. Woodhall et al requires the masking films to

be easily removable and does not rectify the deficiencies of Ohayon. Claim 61 is therefore submitted to be clearly patentable over Ohayon in view of Woodhall et al for the additional limitations recited therein as well as being allowable with independent claim 60.

In light of the foregoing, all of the claims in the subject application are submitted to be in condition for allowance. Action in conformance therewith is courteously solicited. Should any issues in the subject application remain unresolved, the Examiner is encouraged to contact the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke at the end.

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